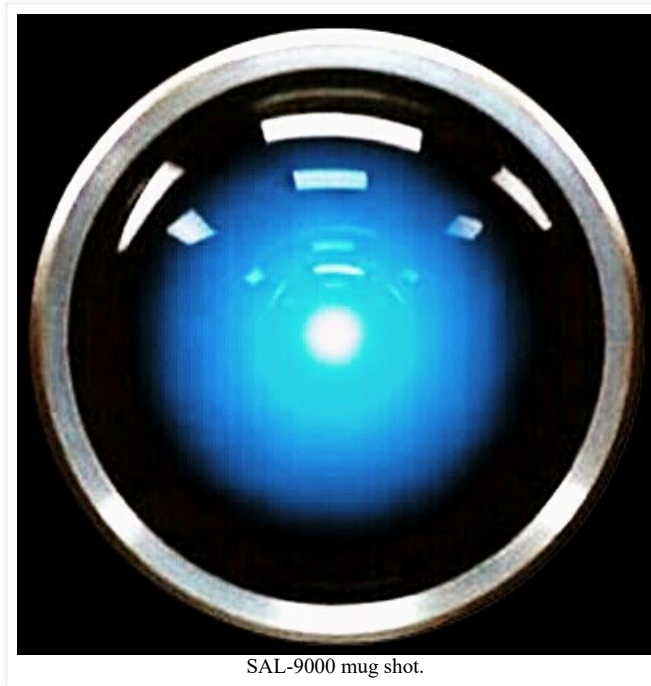


SAL-9000

In the Odyssey Universe, SAL-9000 is the "twin" of HAL-9000. But what of the other members of the family?

Designed by computer scientist Dr. Chandra, SAL-9000 is considered the virtual "twin" of HAL-9000, and both computers are evidently from the same 9000 Series.



SAL-9000 mug shot.

HAL is unquestionably male, and is often referred to as "he". SAL, on the other hand, is certainly a "she", and to emphasize the difference even has the red and blue colors reversed. Both in the novel *2010* and the movie *2010* SAL has, of course, a female voice (in the movie voiced by Candice Bergen, credited as Olga Mallsnerd, perhaps the worst kept secret of the film). However, in the novel SAL has a somewhat peculiar Hindu accent, which the machine is mentioned to have picked up from Dr. Chandra himself.

In contrast with the movie, in the novel Dr. Chandra is still Dr. Sivasubramanian Chandrasegarampillai. In the movie he is simply Dr. R. Chandra. The novel's Chandra is of Indian extraction, and thus his accent has had an influence on SAL's own accent, making the computer change it's vocalizations accordingly. In the movie Chandra is so totally not Indian.

While SAL does not have nearly the same presence as her brother HAL has, the computer's role and participation in the events must be seen as rather important. Pivotal, in fact.

Before the rescue mission to the Jupiter system commences Dr. Chandra uses SAL as a test bed, disconnecting and re-connecting the higher cognitive functions of the computer in order to establish what, if any, damages might occur when doing so. This was done by Chandra in order to copy the actions of Dave Bowman, and to learn how to successfully re-connect the higher functions. It is obvious he managed to re-connect SAL successfully, based on his subsequent triumphs with the "twin" HAL.

Will I dream?

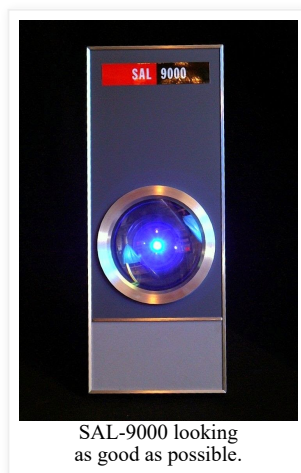
HAL has two birthdays, half a decade apart. In the novel HAL is activated at the HAL Plant in Urbana, Illinois, January 12, 1997.

A sunday.

In the film, however, HAL's "birthday" is January 12, 1992.

Also a sunday.

In the real world, the date was presumably changed to 1992 when Douglas Rain was recording the voice for HAL. Notes suggest audiences may have thought 1997 - as it is in the novel and the script - to be "too far" in the future, and the year was changed, by Kubrick himself, to 1992 during the recording. There are a couple of issues to be addressed regarding this. Having an activation date in 1992 would make HAL 9 years old at the time of the first Discovery mission. Sending a 9-year-old system into space does not seem reasonable. An activation date in 1997 makes HAL only 4 years old, which is a much more reasonable central Operating System age for such an important mission.



Presumably SAL - being the "twin" of HAL - shares the same birthday. This makes SAL either 18 years old - or 13 years old at a minimum - in the year 2010. How many 9000 Series units exist is never disclosed. During the first Discovery mission in 2001 Mission Command analyzed the data regarding HAL's fault prediction of the AE-35 unit using "both our own nine-triple-zeros", which obviously means Mission Command at Houston had two 9000 Series units at their disposal. When HAL is disconnected by David Bowman the computer discloses that it is "HAL Nine Thousand computer Production Number 3". While it would lie close at hand to assume production number 1 and 2 would be the HAL units at Mission Command, nothing in the novel states so.

It is reasonable to assume SAL was used by Dr. Chandra only, and his exchanges with the unit indicate he can interact with the machine in ways that no-one else can. Such operations would hardly be possible if the machine was housed elsewhere. It is thusly fairly reasonable to assume SAL has at least three "siblings", HAL being one of them. A sensible assumption is that there were three HAL-9000 units made in succession at the Urbana HAL plant, the first two being used at Houston and the third being placed on the *Discovery*, and that a fourth unit - the experimental SAL-9000 - was created at the same time by Dr. Chandra for his own use. It is not known whether the other units in the 9000 Series were also designated HAL, though the series itself is designated "the HAL-9000 series".

Arthur C. Clarke never disclosed what SAL stands for. HAL stands for **H**euristic **A**lgorithm, but there are not many concepts within AI research that could be the immediate explanation for the "S" in SAL. The only serious contender is **S**ystematic **A**lgorithm, based on Shelly Chaiken's *Heuristic-Systematic Model of Information Processing*, or HSM for short. It should perhaps be mentioned HSM was popular during the time Clarke wrote *2010: Odyssey Two*.

To make the matter even more mysterious, Clarke later revealed that the name HAL was not even his idea. "It wasn't me," he said in an interview in 2002, "it was Stanley!" Clarke was given no explanation by Kubrick as to why the computer was now named HAL, and he had to come up with a reasonable explanation for the name. "Don't ask me when he changed it to HAL," Clarke said. "I've been

apologizing to all my Harold friends ever since."

It seems Kubrick chose the name HAL merely because he liked it, without any thought as to what it might mean. Keeping this in mind it is rather warranted to suppose Clarke did the same with the name SAL.

Doctor Who?

In the movie *2001: A Space Odyssey*, HAL's first instructor was Dr. Langley, in the novel the first instructor was none other than Dr. Chandra. The inconsistency has been explained in various ways. One explanation states in no uncertain terms that the doctors are, in fact, the same person, without offering any further motivation as to why. Another explanation states that HAL was, in fact, activated twice: once in 1992 and the second time exactly 5 years later in preparation for the Discovery mission. For this second activation programming accuracy was obviously paramount, therefore HAL's designer himself was called in to do the final programming quality control.

Yet a third explanation makes the issue disappear in a puff of irrelevancy by quoting Kubrick: "who cares?"

As an aside, when Hyams and Clarke set up their intercontinental link-up to discuss pre-production of the *2010* movie, they designated their system the only possible name: PAL.

